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WORLD SCANNER REPORT

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PET PEEVE CONTEST DEADLINE EXTENDED to September 30, 1995

Is everybody happy? Or what? Here it is long after the deadline and there are no entries for the Pet Peeve contest announced last issue. *Is it just that summer is here, or are you guys so bubbly and happy that you have nothing about which to fume and gripe? Maybe I shoulda saved this contest for the winter when everyone is cranky and out of sorts?* For the benefit of new readers starting this issue and those old readers who misplaced the last issue of the WSR, following are the rules and an explanation of the contest:

One of my peeves was voiced on page 1 of last issue, under the article, ***BRASS TACKS & STEEL LUGNUTS About the Radio Business***. Now I want to hear yours, just as bold and brassy, no holds barred. There will be a nice prize for each of the top five submitters to be judged by Cindy and me. Here are the rules, terms and conditions:

1. Submittals should be 200-400 words (500 the absolute maximum), on your ***pet peeve about anything related to the radio business or hobby***. Keep the language clean, and avoid peeves about individuals unless about a scam or rip-off. Otherwise, peeves should be about inanimate subjects, companies, groups, products, services, methods, procedures, hardware/software, etc.
2. Deadline for receipt of your submittal is 2400-hrs, (midnight), September 30, 1995. No exceptions.
3. Submit legible entries by Internet e-mail, Fido netmail, CIS e-mail, Fax, postal mail, or private file/message upload on the ***Hertzian Intercept BBS***. See the **Reference Data** box and the **Masthead** above for addresses.
4. ***Prizes*** for each of the five winning entries will be a **PerCon Corp**. ***Spectrum Lite FCC Frequency Database, Spring '95 Ed, CD-ROM***, ready to run, easy to use, with nearly 3-million records. Requires Windows 3.1/up, 4-Mb RAM. Prizes will be sent UPS-ground upon publication of the selections so make sure we have a valid street address. No shipments to PO Boxes!
5. Judges' decisions are arbitrary, capricious & final.
6. Winning names and entries will be published in a forthcoming issue of the ***World Scanner Report***, but anonymity of authorship is assured for those who request it with the entry.
7. Future hint: Next contest will be like this one except about our "*warmest fuzzies*" in radio. ☺

WHY AIR OUR PET PEEVES?

Good question. Airing both gripes and satisfactions aids and promotes a synergy in our mutual attraction: hobby radio. Speaking of which, here is a peeve expressed by an incognito reader on the Internet. Too bad he didn't enter the contest, but get a load out of this dude:

From: Deflater@AOL.com Bill, are you ever capable of answering a topic without injecting venom and insult into nearly every sentence? Despite what you think, not everyone is out to get you.

I read your lastest issue of World Scanner Report, and you have three columns in there in which you explain that you cannot provide your paying customers with the same level of support that other merchants provide theirs. The main reason, you say, is that ever increasing numbers of people are trying to rip you off. I don't know about everyone else, but I paid my $25 and I expect to get my money's worth. When someone doesn't give me what he has committed to delivering, I expect to get some or even all of my money back. I (and I'm sure that most of your readers too) am not out to "take you to the cleaners," as you write in WSR, Mr. Cheek). We're decent, upstanding folks--maybe just as good as you.

Let's look at it from my perspective. The current issue has three columns devoted to your less than charitable views of your customers; it has three columns from a lady who says her husband's scanning hobby is A-OK; and it has 2.5 columns on computer talk in which you say "computers are hear to stay," and "don't buy OS/2 because it is not well supported around the world," other dubious bits of advice. Knock off a couple of more columns for the address label, a plea to renew the subscription and some other house-keeping kinds of stuff. Add it up, and you get 20 columns of good, solid info out of a possible 30. If it were one issue, I suppose that I wouldn't mind, but it's been that way for the last few issues. WSR is becoming less relevant and more a platform for Mr. Cheek's personal views (I'm sorry, that's not what I paid for). Yet, you've already judged that I'm a scam artist and have told me as much in print. What hope do I have of getting a refund (I don't want one, by the way, I just don't plan to renew the subscription).

The point of all of this rambling is that sometimes, Mr. Cheek, you're wrong and the other guy is right. I'm not saying that this is the case here--there's a lot to argue with in what I've said. But if you're not willing ever to concede that you make mistakes or that the other guy's point of view is equally valid, don't expect me to take you seriously.

ED: *Hey, dude, bite me like a dang snake! Your nasty hide-behind-a-screen-name message is so pertinent, I thought I'd display it here as a textbook example of exactly what I meant in last month's Brass Tacks essay.*

I don't know which horse you rode in on, but it's the exact species that adds to the cost of business and results in higher prices for everyone, not to mention a bad attitude. I answered you in great detail on the Internet, the following cuts to the chase:

1. *If you feel you aren't getting your money's worth, you need only ask for a* ***refund of all unsent issues****. That has always been our policy. I will not, however, sell you a book or a stack of back issues so you can run down to your office copier and duplicate them and then come back whining for a refund. Nor will I sell you a kit or do-it-yourself part so you can blow it to smithereens and then howl for a refund or a free replacement. Why should everyone else have to pay for your failure? Companies who provide that sort of "satisfaction" policy may be doing YOU a favor, but the rest of us have to pay for it. You think THEY absorb the loss from your stupidity? Ha! They make the rest of us pay with higher prices; that's all.*

2. *Most radioists of any long standing are honest, decent people. Radio has enjoyed a fantastic growth over the last few years where there are a lot of new people from all walks of Life, some of whom don't know the ropes and don't have an honest bone in their carcass. Obviously, you don't understand how only a small handful of that type can break a small business. So, I don't care if you understand, aside from running last month's article and this reply. I'm not going to position myself and my family to be slicked and skinned by the sicko slimeballs out there. I mentioned my respect for and appreciation of our long time clients who were not included in that categorization. Either you didn't catch that or you're one of those from whom my family and I need protection.*

3. *Your assertion of my "dubious advice" is certainly your opinion and you're welcome to it. But I stand on the advice that OS/2 is not a very good operating system for radio hobbyists, especially entry level types and even most journeymen computists. There is no widespread support for OS/2 and it is a very difficult system to learn. Things that*

work all day long with MS-DOS and Windows can and do choke under OS/2.

4. You said you felt we offered 20 good columns out of 30. That is arguable, but even supposing it's true, I'd like you to show me ANY other magazine or newsletter that offers such a HIGH percentage! Personally, I think you for the compliment. I wish everyone would rate us so highly! I am worried about making every issue contain 5 or 6 columns of interest to each reader!

5. Soooo, you didn't like Janet Cravens' article and a few others? Should I send you an advance copy of the WSR each month for your personal approval? Ahem, better get your wallet open and start fishing out more cold cash for that privilege, pal.....

*6. What makes you think I don't 'fess up when I'm wrong? Or don't concede my mistakes? **(Check the back issues!)** You didn't cite any examples so I don't have the foggiest idea of what you're talking about. As far as conceding that **"the other guy's point of view is equally valid"**, well you got a point there. I don't concede fallacies and horsefeathers. Points of view are NOT equally valid; they are only points of view; nothing more. O.J. Simpson's point of view is that he is innocent. So should he be let go? Harumph! If you want to think the sky is chartreuse, that's fine, but I sure wouldn't feel obliged to concede anything, except maybe that you're color blind or weird.*

7. Your refund is available upon request. Meanwhile, if you want any credibility or respect from me, use your real name when you communicate with me. Otherwise, all I see is a snotty, vicious, nincompoop hiding in the dark, to whom I will not pretend civility, sociability, or respect. You could be a drug peddler or a government agent for all I know.

SCANNER DATABASE

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Here it is, Roy Schahrer's comprehensive database of all scanners ever made (of which he is aware.) Last time I published this list for Roy was in Vol-2 of my Scanner Mod book where about 250 scanners were listed. *The list has since grown to 527.* One reason for publishing this fine list is as a public service. Another is to solicit ***your*** additions, corrections, or comments to help keep it updated.

The list should be self explanatory, with only four fields of data: brand name, model name or number, Programmable?, and number of channels. Codes used are Y=yes, N=no; ?= uncertain/unknown. Non-programmables are usually crystal controlled. Please send me your input which I'll forward to Roy so he can keep the list updated. Hat's off to Roy Schahrer of Tempe, Arizona:

Brand	Model	Prog	#Chan
Alaron	B-8002	?	?
Alinco	DJ-X1	Y	100
AOR	AR-22a	Y	1
AOR	AR-22b	Y	1
AOR	AR-22c	Y	1
AOR	AR-22d	Y	1
AOR	AR-22e	Y	1
AOR	AR-33	Y	2
AOR	AR-160	Y	16
AOR	AR-800	Y	20
AOR	AR-880	Y	20
AOR	AR-900	Y	100
AOR	AR-950	Y	100
AOR	AR-1000	Y	1000
AOR	AR-1500	Y	1000
AOR	AR-2000	Y	1000
AOR	AR-2001	Y	100
AOR	AR-2002	Y	20
AOR	AR-2500	Y	2016
AOR	AR-2515	Y	2000
AOR	AR-2800	Y	?
AOR	AR-3000	Y	400
AOR	AR-3000a	Y	400
AOR	AR-8000UK	Y	1000
ASA	AirPro 2	?	?
B&K	PF-1	?	?
Bearcat	8 Trk Scanner	?	4
Bearcat	BC-3	?	0
Bearcat	BC-4	?	?
Bearcat	BC-5	N	8
Bearcat	BC-5 HLU	N	5
Bearcat	BC-12	N	10
Bearcat	BC-15	N	10
Bearcat	BC-16	?	?
Bearcat	BC-50XL	Y	10
Bearcat	BC-55XLT	Y	10
Bearcat	BC-60XLT	Y	?
Bearcat	BC-65XLT	Y	10
Bearcat	BC-70XL	Y	16
Bearcat	BC-70XLT	Y	20
Bearcat	BC-80XLT	?	?
Bearcat	BC-100	Y	16
Bearcat	BC-100XL	Y	16
Bearcat	BC-100XLT	Y	100
Bearcat	BC-101	Y	16
Bearcat	BC-140	Y	10
Bearcat	BC-140XL	Y	10
Bearcat	BC-142	Y	10
Bearcat	BC-142XL	Y	10
Bearcat	BC-144XLT	Y	?
Bearcat	BC-145XL	Y	16
Bearcat	BC-147XL	Y	16
Bearcat	BC-150	Y	10
Bearcat	BC-151	Y	10
Bearcat	BC-155	Y	16
Bearcat	BC-160	Y	16
Bearcat	BC-170	Y	16
Bearcat	BC-172XL	Y	20
Bearcat	BC-175XL	Y	16
Bearcat	BC-175XLT	Y	16
Bearcat	BC-177XLT	Y	16
Bearcat	BC-178XLT	Y	?
Bearcat	BC-180	Y	16
Bearcat	BC-20/20	Y	40
Bearcat	BC-200	Y	16
Bearcat	BC-200XLT	Y	200
Bearcat	BC-201	Y	16
Bearcat	BC-205XLT	Y	200
Bearcat	BC-210	Y	10
Bearcat	BC-210XL	Y	18
Bearcat	BC-210XLT	Y	40
Bearcat	BC-210XW	Y	20
Bearcat	BC-211	Y	18
Bearcat	BC-220	Y	20
Bearcat	BC-220FB	Y	20
Bearcat	BC-220RC	Y	20
Bearcat	BC-220XLT	Y	200
Bearcat	BC-250	Y	50
Bearcat	BC-260	Y	16
Bearcat	BC-300	Y	50
Bearcat	BC-300a	Y	10
Bearcat	BC-310a	N	?
Bearcat	BC-330a	?	?
Bearcat	BC-350	Y	50
Bearcat	BC-350A	Y	50
Bearcat	BC-400XLT	Y	16
Bearcat	BC-560XLT	Y	16
Bearcat	BC-580XLT	Y	100
Bearcat	BC-590XLT	Y	100
Bearcat	BC-600XLT	Y	100
Bearcat	BC-760XLT	Y	100
Bearcat	BC-800XLT	Y	40
Bearcat	BC-855XLT	Y	50
Bearcat	BC-890XLT	Y	200
Bearcat	BC-950XLT	Y	100
Bearcat	BC-One	Y	?
Bearcat	BC2500XLT	Y	400
Bearcat	BC8500XLT	Y	400
Bearcat	CompuScan 2100	Y	200
Bearcat	Five/Six	N	6
Bearcat	Four/Six	N	6
Bearcat	III - H/U	N	8
Bearcat	III - L/H	N	8
Bearcat	IV	N	8
Bearcat	Thin Scan AC	?	4
Bearcat	Thin Scan BC H/U	?	4
Bearcat	Thin Scan BC L/H	?	0
Bearcat	Two/Four	N	4
Black Jaguar	BJ200 Mk3	Y	16
Black Jaguar	BJ200 Mk4	Y	16
Browning	XM-888	?	?
Camis	HSC-010	Y	1000
Camis	HSC-050	Y	1000
Channel Master	CS6258	?	?
Channel Master	CS6790	?	?
Channel Master	CS6794	?	?
Claricon	37500	?	?
Claricon	Sky-Scanner	?	?
Cobra	SR-10	Y	10
Cobra	SR-11	Y	10
Cobra	SR-12	Y	16
Cobra	SR-15	Y	100
Cobra	SR-900	Y	16
Cobra	SR-9000	Y	10
Cobra	SR-901	Y	10
Cobra	SR-925	Y	16
Colt	228	Y	16
Comtel	102	Y	10
Comtel	203	Y	200
Comtel	204	Y	200
Comtel	205	Y	400
Craig	1254	?	?
Craig	4350	N	10
Craig	4350A	?	?
Craig	4351	N	4
Craig	4353	?	?
Craig	4354	?	?
Drake	?	?	?
Electra	JR-1II	N	2
Electra	JR-1U	N	2
ESC	RX-40 Mk 1	Y	1
ESC	RX-40 Mk 2	Y	1
Fairmate	HP-1000AB	1000	?
Fairmate	HP-100E	Y	1000
Fairmate	HP-200	Y	1000
Fairmate	HP-2000	Y	1000
FaNn	M8-HLU	N	8
FaNn	SlimScan 6 HLU	N	6
FaNn Courier	Cop-Scan	?	?
Fieldmaster	MF-200L	?	?
FOX	BMP 10/60	Y	10
Fox	Fox-Pac 100	Y	100
G.E.	7-2975A	?	?
G.E.	7-2985A	?	?

G.E.	7-2990	?	?
G.E.	7-2995A	?	?
G.E.	?	Y	8
G.E.	?	Y	4
Gemtronics	Scanmaster 12	?	?
Gemtronics	Scanmaster 8	?	?
Globe	9700	?	?
GRE	GRE-10	Y	16
Handic	006	?	?
Handic	007	?	?
Heathkit	GR-110	?	?
Heathkit	GR-740	Y	40
HyGain	616	?	?
HyGain	618H	?	?
HyGain	618L	?	?
HyGain	618L/H/U	?	?
HyGain	625	?	?
HyGain	626	?	?
HyGain	ProScan 16	N	16
Icom	IC-2SRA	Y	60
Icom	IC-4SRA	Y	60
Icom	R-1	Y	100
Icom	R-100	Y	121
Icom	R-7000	Y	100
Icom	R-7100	Y	100
Icom	R-9000	Y	1000
JC Penney	981-6066	?	?
JC Penney	981-6067	?	?
JC Penney	981-6080	?	?
JC Penney	981-6081	?	?
JC Penney	981-6082	?	?
JC Penney	981-6083	?	?
JC Penney	981-6084	?	?
JC Penney	981-6085	?	?
JC Penney	Pinto 981-6065	?	?
JIL	SX-100	Y	16
JIL	SX-200	Y	16
JIL	SX-400	Y	20
Johnson	Duo-Scan H/L	N	8
Johnson	Duo-Scan H/U	N	8
Johnson	Mini-Scan	N	4
Johnson	MoN-Scan H	N	8
Johnson	MoN-Scan U	N	8
Jupiteru	MVT-5000	Y	100
Kenwood	RZ-1	Y	100
Kris	Hand Scan	?	?
Kris	Hand Scan VHF	?	?
Kris	Tri Band	?	?
Lafayette	HI-U-100	N	4
Lafayette	Monitorscan 3B-8	?	8
Maxon	WX-1	?	?
Midland	13-903	N	4
Midland	13-903B	?	?
Midland	13-904	N	4
Midland	13-908	?	?
Midland	13-912	?	?
Midland	13-914	?	?
Midland	13-915	?	?
Midland	13-916	N	4
Midland	13-918	N	4
Midland	13-919	N	4
Midland	13-921	N	4
Midland	13-922	?	?
Midland	13-925	?	?
Midland	13-925H/L/M	?	?
Midland	13-927	?	?
Midland	13-930	N	8
Midland	13-934	N	8
Midland	13-937	?	?
Midland	13-940	?	?
Midland	13-944	N	8
Midland	13-950	N	16
Midland	74-102	?	?
Midland	?	N	4
Morse Electphnc	SC600	?	?
NDK	SX-200	?	?
Nevada	3000	Y	?
Nevada	MS-1000	Y	1000
Pace	Scan 10-4H	N	4
Pace	Scan 10-4H/L/U	N	4
Pace	Scan 10-4L	N	4
Pace	Scan 10-4U	N	4
Pace	Scan 108H	N	8
Pace	Scan 108H/L/U	?	?
Pace	Scan 108L	N	8
Pace	Scan 108U	N	8
Pace	Scan 208	?	?
Pace	Scan 208A	N	8
Pace	Scan 216	N	16
Pace	Scan 308	N	16
Pace	Scanmate 150	N	4
Panasonic	RE-1800	?	?
Pearce Simpson	Cherokee 8+8	N	16
Pearce Simpson	Cheyenne 8	N	8
Pearce Simpson	Comanche 16	N	16
Pearce Simpson	Gladding Hi-Scan	?	?
Pearce Simpson	PR- 78	?	?
Pearce Simpson	PR-160	?	?
Penncrest	?	?	?
Peterson	RM2/4	N	4
RCA	16S100	?	?
RCA	16S200	?	?
RCA	16S300	N	8
RCA	16S400	?	?
RCA	SCAN-AIRE	N	4
RCD	MRP-1H	N	1
RCD	MRP-1L	N	1
RCD	MRP-1U	N	1
Realistic	Comp 100	Y	?
Realistic	PRO-1	?	?
Realistic	PRO-2	?	?
Realistic	PRO-2A	?	?
Realistic	PRO-2B	?	?
Realistic	PRO-3A	?	?
Realistic	PRO-4	?	?
Realistic	PRO-4A	N	4
Realistic	PRO-5	N	4
Realistic	PRO-5A	?	?
Realistic	PRO-6	N	4
Realistic	PRO-7	N	?
Realistic	PRO-7B	N	8
Realistic	PRO-9	N	8
Realistic	PRO-10	?	?
Realistic	PRO-11	N	4
Realistic	PRO-12	N	4
Realistic	PRO-13	?	?
Realistic	PRO-14	N	10
Realistic	PRO-16	N	?
Realistic	PRO-16A	N	16
Realistic	PRO-20A	?	?
Realistic	PRO-21	N	4
Realistic	PRO-22	N	6
Realistic	PRO-23	Y	50
Realistic	PRO-23	N	4
Realistic	PRO-24	N	4
Realistic	PRO-24	Y	16
Realistic	PRO-25	N	8
Realistic	PRO-25	Y	100
Realistic	PRO-26	N	4
Realistic	PRO-27	N	2
Realistic	PRO-30	Y	16
Realistic	PRO-31A	Y	10
Realistic	PRO-32A	Y	200
Realistic	PRO-33	Y	20
Realistic	PRO-34	Y	200
Realistic	PRO-35	Y	100
Realistic	PRO-36	Y	20
Realistic	PRO-37	Y	200
Realistic	PRO-38	Y	10
Realistic	PRO-39	Y	200
Realistic	PRO-40	N	8
Realistic	PRO-41	Y	10
Realistic	PRO-42	Y	10
Realistic	PRO-43	Y	200
Realistic	PRO-44	Y	50
Realistic	PRO-46	Y	100
Realistic	PRO-47	?	?
Realistic	PRO-48	N	10
Realistic	PRO-49	Y	10
Realistic	PRO-50	Y	50
Realistic	PRO-51	Y	200
Realistic	PRO-52	N	8
Realistic	PRO-53	N	?
Realistic	PRO-54	N	8
Realistic	PRO-55	N	10
Realistic	PRO-56	N	8
Realistic	PRO-57	Y	10
Realistic	PRO-58	Y	10
Realistic	PRO-59	8	?
Realistic	PRO-62	Y	200
Realistic	PRO-77	N	8
Realistic	PRO-77A	0	?
Realistic	PRO-78	0	?
Realistic	PRO-508	Y	20
Realistic	PRO-2001	Y	16
Realistic	PRO-002	Y	50
Realistic	PRO-2003	Y	60
Realistic	PRO-2004	Y	300
Realistic	PRO-2005	Y	400
Realistic	PRO-2006	Y	400
Realistic	PRO-2008	Y	?
Realistic	PRO-2009	Y	8
Realistic	PRO-2010	Y	20
Realistic	PRO-2011	Y	20
Realistic	PRO-2020	Y	20
Realistic	PRO-2021	Y	200
Realistic	PRO-2022	Y	200
Realistic	PRO-2023	Y	20
Realistic	PRO-2024	Y	60
Realistic	PRO-2025	Y	20
Realistic	PRO-2026	Y	100
Realistic	PRO-2027	Y	100
Realistic	PRO-2028	Y	50
Realistic	PRO-2029	Y	60
Realistic	PRO-2030	Y	80
Realistic	PRO-2032	Y	200
Realistic	PRO-2033	Y	10
Realistic	PRO-2034	Y	60
Realistic	PRO-2035	Y	1000
Realistic	PRO-2036	Y	200
Realistic	PRO-2037	Y	200
Realistic	PRO-2038	Y	50
Realistic	PRO-2039	Y	100
Regency	156XL	Y	10
Regency	ACT-E10H/L/U	?	?
Regency	ACT-E16H/L	?	?
Regency	ACT-E16H/L/U	?	?
Regency	ACT-E8H	?	?
Regency	ACT-E8L	?	?
Regency	ACT-EH/L	?	?
Regency	ACT-M8H	?	?
Regency	ACT-M8H/L	?	?
Regency	ACT-M8L	?	?
Regency	ACT-R-1-High	N	1
Regency	ACT-R-1-Low	N	1
Regency	ACT-R-1-UHF	N	1
Regency	ACT-R-10HLU	N	10
Regency	ACT-R-20	N	20
Regency	ACT-R-92AP	N	9
Regency	ACT-T-720A	Y	?
Regency	ACT-T16K	Y	?
Regency	C-4 H/L/U	4	?
Regency	C403	N	4
Regency	D-100	Y	?
Regency	D-300	Y	30
Regency	D-310	Y	30
Regency	D-810	Y	50
Regency	DX-3000	Y	20
Regency	E106	N	10
Regency	H-604	N	6
Regency	H-604E	N	6
Regency	HX-1000	Y	30
Regency	HX-1200	Y	45
Regency	HX-1500	Y	55
Regency	HX-2000	Y	100
Regency	HX-2200	Y	100
Regency	HX-650	N	6

Regency	HX-750	N	6
Regency	HX-850	Y	55
Regency	INF-1	N	?
Regency	INF-2	Y	50
Regency	INF-3	Y	60
Regency	INF-5	N	?
Regency	INF-7	N	10
Regency	INF 10	N	?
Regency	INF 50	?	?
Regency	K100	Y	10
Regency	K500	Y	40
Regency	M100	Y	10
Regency	M400	Y	30
Regency	MX-3000	Y	30
Regency	MX-4000	Y	100
Regency	MX-4200	Y	100
Regency	MX-5000	Y	20
Regency	MX-5500	Y	20
Regency	MX-7000	Y	20
Regency	R1016	Y	16
Regency	R1040	Y	10
Regency	R1050	Y	10
Regency	R106	N	10
Regency	R1060	Y	10
Regency	R1070	Y	10
Regency	R1075	Y	15
Regency	R1077	?	?
Regency	R1080	Y	30
Regency	R1090	Y	45
Regency	R1099	Y	45
Regency	R1600	Y	100
Regency	R2060	Y	60
Regency	R2066	Y	60
Regency	R3020	Y	20
Regency	R4010	Y	10
Regency	R4020	Y	100
Regency	R4030	Y	200
Regency	R804	N	8
Regency	R806	N	8
Regency	TK-16	?	?
Regency	TMR-1 H	N	1
Regency	TMR-1 L	N	1
Regency	TMR-1 U	N	1
Regency	TMR-12	N	12
Regency	TMR-8H	N	8
Regency	TMR-8HL	N	8
Regency	TMR-8L	N	8
Regency	TMR-8U	N	8
Regency	TS-1	Y	35
Regency	TS-2	Y	75
Regency	WHAMO 10	Y	10
Regency	Z10	Y	10
Regency	Z30	Y	30
Regency	Z45	Y	45
Regency	Z60	Y	60
Revco	RS-2000E	?	70
Revco	RS-3000	?	50
Robyn	100	?	?
Robyn	100B	?	?
Robyn	200	?	?
Robyn	4000	?	?
Robyn	Hi-Bander	?	?
Robyn	Hi-Low-Bander	?	?
Robyn	HL-8+8	?	?
Ross	9000	?	?
Sakio	SC-1600	?	16
SBE	OptiScan 125M	Y	?
SBE	Sentinel I	N	8
Sears	564-36280600	N	?
Sears	564-36290600	?	?
Sears	564-36330600	?	?
Sears	564-36390600	?	?
Sears	?	Y	?
Sharp	FZ-400	?	?
Shinwa	SR 001	Y	200
Signal	R535	Y	60
Sonar	FR-101	?	?
Sonar	FR-102	?	?
Sonar	FR-104	N	?
Sonar	FR-105	N	?
Sonar	FR-2512	N	?
Sonar	FR-2513	N	24
Sonar	FR-2514	?	?
Sonar	FR-2515	?	?
Sonar	FR-2516	N	?
Sonar	FR-2517	?	?
Sonar	FR-2525	?	?
Sonar	FR-2526	?	?
Sonar	FR-2527	N	?
Sonar	FR-2528	?	?
Sony	AIR-7	Y	40
Sony	AIR-8	Y	40
Sony	CRF-V21	Y	?
Sony	PRO-70 Mk1	Y	?
Sony	PRO-70 Mk2	Y	?
Sony	PRO-70 Mk3	Y	?
Sony	PRO-80	Y	40
Squires Sanders	FM-Alert	?	?
SSC	SR001	Y	16
Standard	AX-700	Y	100
Surveyor	10HLP	?	?
Surveyor	10P	?	?
Surveyor	4H4U	?	?
Surveyor	4UHF	?	?
Surveyor	4VHF	?	?
Surveyor	8HLP	?	?
Teaberry	Scan T	?	?
Teaberry	T Scan	?	?
Tennelec	MCP-1	Y	?
Tennelec	MemoryScan MS-2	Y	16
Tennelec	Tennetrac I	?	?
Tennelec	Tennetrac II	?	?
Tennelec	Tennetrac IV	?	?
Trident	TR- 980	Y	125
Trident	TR-1200	Y	1000
Trident	TR-2400	Y	1000
Uniden	MR-8100	Y	100
Unimetrics	Digi-Scan 4+4	?	?
Unimetrics	Digi-Scan 8	?	?
Unimetrics	Dura Scan 4	?	?
Unimetrics	Dura Scan 8	?	?
Vanguard Labs	WEPIX 2000-B	?	?
Wards	GEN-838A	?	?
Wards	GEN-846A	?	?
Wards	GEN-856A	?	?
Win	108	Y	200
Yaesu	FRG-9600	Y	100
Yupiteru	MVJ 5000	Y	100
Yupiteru	MVJ 6000	Y	100
Yupiteru	MVT-3100	Y	100
Yupiteru	MVT-7000	Y	200
Yupiteru	MVT-7100	Y	1000
Yupiteru	MVT-8000	Y	1000
Yupiteru	VT125UK	Y	30
Yupiteru	VT150	Y	30
Yupiteru	VT225	Y	100

IN MEMORIAM

We were saddened to learn of the passing from this Life into the Next of one of our readers, William Wilson, of Aberdeen, UK. May he rest in peace and amass power for another assault upon the airwaves someday.

THE FUTURE OF RADIO & SCANNING

Well, this one is sure to send ol' ***deflater@aol.com*** scrambling for pencil and paper upon which to demand his refund. We're going to talk more about computers with lots of "dubious advice". Sorry, I can't help it. I have a vision. I have a dream. My vision and dream do not come from a bottle of alcohol or a pipeful of smoking dope. I'd bet serious money and one of my TurboWhopper scanners on my vision being crystal clear and the dream coming true. ***Listen up!***

Radio, as we know it, is almost over. The show is wrapping up; the drama is in its final act; after which the name of the play is going to change. And, hey, Bunky, you're going to have to change, too; else take up knitting or hopscotch, maybe. You think I'm kidding? I'm not. Some fifteen years ago, Ed Bruce sang "*The Last Cowboy's Song*"..... "*The end of a hundred-year waltz.....*" It won't be long before the end of another hundred-year waltz..... Radio is changing.....

Radio is an ***analog*** physical phenomenon just like light, heat, gravity, mass, etc. The universe seems to be an ***analog*** entity. Bear with me for an explanation of ***analog*** and what it means. If you were to walk up an inclined ramp, you'd be on an ***analog*** device. Walk up a set of stairs, and you're on a ***digital*** device. Continuous, smooth motions, changing or stable are ***analog*** in nature. Sudden, jerky motions are ***digital*** in nature.

A 12" ruler is an analog device between 0 - 12". A voltmeter with a needle is an analog device. A sundial is an analog device. A clock with a smooth, continuously moving second-hand is an analog device. On the other hand, a water clock (timed by drops) is a digital device. Morse code is digital in nature. So are smoke signals, traffic lights, brake lights, turn signals, and "digital" watches, multimeters, frequency counters, etc....and computers.

Generally speaking, things of a digital nature and those of an analog nature do not mix well. You do one or the other, but not both. There are exceptions.

Radio has a few, but only a very few. Morse code is one of the best examples, which is nothing more than turning a radio carrier wave on and off in an intelligent pattern. For example, three staccato "on-off's" followed by three longer "ons-off's" and concluding with three more staccato "on-off's" generates the well-known international distress signal: S-O-S:

●●● ▭▭▭ ●●● or ... - - - ...

In this example there are three states of possibility, each of which are used in combination with the others to convey meaning or intelligence: (1) a short burst, (2) a longer burst, and (3) nothing. Lest you're confused, the "nothing" is what goes between the bursts, short or long. We think of digital as two-states, on or off; 1 or 0, yes or no, etc, and it's true, most modern digital logic is two-state. *It just doesn't have to be.*

The RF spectrum from DC to Daylight is an analog, physical resource. It is most easily used with other analog resources like voice. Radio waves and voice go together like pizza and anchovies; peanut butter and jelly; dogs and fleas.

But there is a problem. Voice comm is grossly inefficient, subject to misunderstanding, whether by stupidity, noise, interference, deafness, or whatever. Voice communication is also not very secure and it can be very costly. The times are changing with economy and efficiency being key to the times. Everything has to pay its own way, or it is likely to be changed or eliminated.

Radio communications as we know it, is right up there on the list for a critical view by almost everyone who uses it, with exception, perhaps, of we hobbyists. If this status quo doesn't change, we will wake up some day to the sound of silence on our radios....or a cacaphony of shrieks, squeals, howls, static, peeps, beeps, tweets, pops and farts. (*Hell, it's already that way on CB, right?*) Even now, you can tune the shortwave and scanner spectrums to see what I mean. Pure, understandable, interesting, voice signals are scarcer each year. No?

Not that voice radio communication is going to disappear altogether; it is not. Not in our lifetimes, anyway. But we're going to hear less and less of it, that's for sure. Already, the more interesting public safety & business communications are frogging to the 800 MHz trunked bands where monitoring with a scanner is more difficult and a lot less fun.

It's only going to get worse as these agencies and users grit their teeth at the same old problems of limited range, limited intelligibility, and limited access to the spectrum. Next stop, DIGITAL !!

Yes, voice and other forms of comms can be digitized and imposed on a radio carrier wave. The FBI, DEA, and other federal agencies are using Digital Voice Processing (DVP) in conjunction with the Digital Encryption Standard (DES) to throw completely undecipherable signals all over the spectrum. Even if there were no DES, it would still be impossible for most hobbyists to decode the signals.

That's right, Bunky, you cannot readily decode digital voice signals, and for many of the same reasons we can't decode Mobile Display Terminal (MDT) signals that are coming into vogue with our public safety agencies.

And then there is an emerging analog technique called *spread spectrum*, where the signal is all over the band, controlled by digital techniques. The hobbyist cannot monitor spread spectrum.

In a word, the world's radio comms are gearing up to move into digital techniques, most of which are not within the capability of the hobbyist to detect and to decode. The more this happens, the fewer hobbyists will be left in the arena and the less devlopment of new hobbyist equipment.

This IS going to happen; it IS happening because digital signals are MUCH more efficient, thorough, speedier, reliable, and less costly to produce than analog signals. The change is not going to be an overnight thing, but it is happening at a fast rate and scanning, as we know it, will be forever changed by the turn of the century. We have to change, too, in order to keep pace and to stretch our hobby interests out there to where the hot stuff is happening.

By and large, this means you have to get computerized. You have to anyway, because radio isn't the only focus in the digital revolution. It fact, radio is one of the last bastions of analog dominance. Already, our cars, washing machines, VCR's, and most other electronic apparatus are computerized. I expect ol' Edward Crapper's flush toilet to become computerized before long. Little do you know....*or maybe you do*, that a personal computer can be interfaced to almost anything electronic for easier, faster, and less toilsome operation.

This is where I see our hobby as an extension of Life. All of my scanners are computer controlled now, and a hell of a lot of my work and other pleasurable pursuits are computer based. There is a LOT of radio related FUN to be had with a computer in the background doing work that you'd never do on a bet or a dare. *And the more the radio services become computerized, the more you're going to have to*, or else take up knitting.

Therefore, it will become the policy of the ***World Scanner Report*** to take the lead in gently, but firmly guiding the hobby community into computer literacy. There is no other recourse. We do not have a choice. Well, I suppose some people clung to their horses and buggies for a while after Henry Ford introduced his Model A. I guess others insisted on telegraph messages even after the telephone became a household tool, but you get what I mean here?

HOW TO BUY A COMPUTER FOR YOUR SHACK & STATION

I suppose most any computer will do for basic needs around shop and shack, but old clunkers and underpowered new ones will be a millstone around your neck in no time flat. Old and underpowered computers may meet a few present needs if not too rigorous, but there is almost no room for growth if you're lugging around an old clunker.

A computer that's bigger and better than you are will challenge you to find bigger and better uses for it besides keeping up the family checkbook and playing stupid video games. (*There are a dozen computers around my shop, shack, and home, and video games are forbidden except under rare circumstances!*) If you already have an old computer, fine; use the hell out of it. But if you are in the market for a new one, there are certain guidelines that can save you some heartache and ulcers later. It is important to get equipped and ready for both now and the future....which means it should be adequate for the next 1-3 years. One year is fine for those who can make a living from their computers; but as a radioist and leisure computist, you'll want to make sure that new machine is good for the next two or three years. By that time, it will be outdated and ready for lesser important duties

Stick to IBM/compatible computers, too! Amiga and Atari are effectively gone. Macintosh is a fine computer, but not widely seen or used around the radio scene. Old Apples and TI's are worthless. IBM/compatibles only, please!

You need to know how to buy a computer with the ***minimum*** of what you need. The below Computer Buylist is a tabulation of all the important aspects or variables associated with what you might want or should require in a computer.

COMPUTER BUYLIST

1. Case: *desktop, mini-tower,* ***tower***
2. Power Supply: *100,* ***150****, 200, 250 watts*
3. Motherboard: *selectable CPU*
4. CPU: *386/33,* ***486DX2/66****; Pentium*
5. Cache: *External* ***128k****, 256k*
6. BIOS: ***AMI****; Award; Phoenix*
7. Bus: *ISA,* ***VLB****, PCI, EISA*
8. RAM (Mb): *4,* ***8****, 16, 32, 64, 128*
9. Floppy Drive (A): ***3½"***
10. Floppy Drive (B): 5¼"
11. Floppy Drives (A & B): ***Both in one***
12. (C)Hard Drive (Mb): *345,* ***540****, 1000*
13. Drive Controller: ***IDE***/EIDE/PCI
14. SCSI Controller - *bootable - nonbootable*
15. Keyboard, *enhanced, 101-key*
16. Mouse, ***InPort****; PS2; Serial*
17. Video Controller: ISA/***VLB***/PCI
18. Video RAM (Mb): .5, ***1****, 2, 4, 8*
19. Monitor Brand: ***Shamrock****, Sony, NEC*
20. Monitor Type: *RGB, CGA, VGA,* ***SVGA***
21. Monitor Size: *14",* ***15"****, 17", 21"*
22. Serial I/O: ***COM1-COM2*** *& COM3-COM4*
23. Parallel I/O: ***LPT1****, LPT2, LPT3*
24. Modem, ***External****; Internal*
25. Modem Type: ***28.8-kbps/Fax:*** 14.4-kbps/Fax; 9600-bps or faster
26. Operating System, ***Windows 95****; MS-DOS 6.2x-Windows For WorkGroups 3.11;* MS-DOS 6.2-Windows 3.1 & up; OS/2, Unix
27. CD-ROM: *1x,* ***2x****, 3x, 4x, 6x*
28. Sound/Audio Card: ***SB-16****, PAS-16*
29. Speakers: ***LabTec CS-150****, Peavey*
30. Microphone
31. Printer, *Laser; Ink Jet;* ***Dot Matrix***
32. Scanner, *page/****handheld****, color/****B&W***

From the above list, I can verbalize that the minimum new computer that you should buy is a "*486DX2/66 in a tower case w/150-w power supply; 8-Mb RAM; AMI Bios; 540-Mb IDE hard drive and controller; Vesa Local Bus (VLB); 128-k cache memory; 3½" floppy drive, VLB Video Controller w/1-Mb RAM, 15" SVGA monitor; two serial ports; one parallel port; and an external 28.8-kbps Fax/modem.*" Your operating system should be ***Windows 95***, but MS-DOS 6.2x and Windows For WorkGroups 3.11 are ok.

Optionally, but no less important if budget permits, you should specify a 2x CD-ROM, Soundblaster 16 audio card with decent speakers and a microphone. A dot matrix printer and a handheld B&W scanner round out the serious radioist's computer warbag.

Now this list is not hard and fast, mind you. It's more of a starting point for those not in the know. You'll soon learn, if you don't already know, that nothing is hard and fast in the computer world. My Buy List is just a guideline for those who need a frame of reference. There may be some things on that list that you know nothing about. If so, don't worry about it. The thing is that if you're buying a new computer, there is no sense in underpowering yourself from the onset.

When you're green and your computer can't do certain things, you'll never do them. If your computer can do them, but you can't, relax: the day will come when you can.

You'll be told how 4-Mb of RAM is all you'll need. Forget it! Modern computing requires 8-Mb. You'll be told you'll need only about 200-Mb of hard drive space. Forget it; you need 540-Mb, minimum, and 1-Gb if you're smart. They'll say all you need is a 14" VGA monitor. Hah! Make it easier on yourself for only a few bucks more. Go for 15" ***Super*** VGA (SVGA), and a 17" size if you can afford it. Shamrock is a good economical brand name, but there are others.

Unscrupulous salespeople will tell you a plain serial mouse is all you need. True, until you add a modem to the other serial port and then you're stuck for technical reasons I'll not get into here. Instead, insist on a *bus mouse*, either InPort or PS/2. A *bus mouse* does not use a serial port nor the precious IRQ 3 or 4. (Techie jargon.) The thing is, computers let you run two serial devices at the same time without problems. But radio equipment needs one serial port; a modem needs one; and if your mouse uses one, something's got to give. That's why a *bus mouse* is important (but it also works better than a serial mouse.)

Modems. Don't get suckered into slow speed modems under 9600-bps. Time is money, so you shouldn't settle on anything less than the new v.34 modems with fax and 28.8-kbps speed. Serial ports must be based on the 16550 UART. The US Robotics Sportster v.34 Data/Fax, modem is a good buy and is compatible with just about everything out there. Whatever you do, get an external modem. No sense in using a valuable slot in the computer and besides, the lights are pretty and there's more to learn and absorb from external modems. Resale value is higher and there's more you can do with them.

Sound cards for the radioist? Hell yes! There are dozens of uses for sound cards in radio, the least of which is sound processing to extract intelligible audio from noisy signals. How about DTMF decoding? CTCSS detection? RTTY, AMTOR, FSK, and much more are feasible with a sound card in your computer.

Tower cases important? Sure! They're easier to open up and to work inside. Say what? Well, you're a hacker, aren't you? Hackers dig inside their scanners, and they may as well dig around inside their computers, too. Computers were made for hacking; scanners aren't. A tower case is usually roomier and a little better situated for the hacker who may or may not bother putting the case back on. Yes, there are a bunch of things you can add to a computer to enhance your radioing pleasure. A tower case makes it a little easier. And if you can work inside your computer, you'll save $$$! And you'll be one bad dude or gal around town! There's not a lot to it, believe me!

Summarizing, computers and scanners are becoming inseparable. For many of us, they already are! You may as well buy smart when you buy. If you are anti-computer, your radio days are numbered. The Information Age is upon us, and it takes a computer to help with the processing and storing of that information. For some of you, this may be a formidable concept. For some of us, it is "old hat". But I gotta tell you to get with the program if you haven't already done so.

HACKER RESOURCES

Listen up, here's another resource for you kick-butt hackers.

MECI
340 E. First Street
Dayton, OH 45402
(800) 344-4465
Internet Catalog: HTTP://WWW.MECI.COM/

MECI appears to be an industrial surplus house, like our favored Hosfelt Electronics. But these guys are different enough that you'll want to add them to your database.

MECI seems well stocked with electronic components, fabrication materials, electric motors, power supplies, fans, wire & cables, connectors, specialized transformers, and some slick surprises like a 12-v/1-amp DC Adapter with 1.2-mm coaxial power plug, positive polarity: looks like it will fit right up to the ***PRO-2004/5/6/2035*** and other scanners with an external DC jack. The best part is the price of $6.50 ea or $5.50 ea/5 & up. (Cat No: 600-0225).

PORTABLE POWER RESOURCE

"***Batteries for Everything Portable***" is the motto of

Power Express
3 Portola Road; Unit - A
Portola Valley, CA 94028-7800
(800) 769-3739 (24-hrs/day)
Internet e-mail: powerexpress@batnet.com
http://www.baynet.com/powerexpress.html

Power Express carries a wide line of NiCd and NMH batteries along with a host of supplies for the road warrior. It's worth having their catalog and entry in your database for times of need. You never know.

SORRY WE'RE LATE

This issue was started back in July and didn't hit the mail until the first of September. Please accept our apologies. I'm having an odd health problem at the same time that a stack of other pressing matters came down all at once. Priorities had to be shuffled and the time to write was not there. I rationalized that this is summer when radio traditionally declines in interest anyway, so we decided to put this issue on the back burner and take care of other things.

This is V5N6 with four more to go for the balance of this publishing year. Regardless of the delay, we are committed to ten issues per publishing year; five per half year, and that's what you're assured of getting. We've had a number of calls, letters, and e-mails wondering where the WSR was. That's where. But we're headed back on track and expect to be "normal" by the end of the year. Thanks for your patience.

NEW SCANNER PRODUCT
PAGER DATASCOPE

JSoft Technology comes to market with their new pager decoder software and hardware. (*See what I mean about computers and radio?*) The ***Pager DataScope*** interface hardware consists of a shielded cable with a DB-9 connector on one end and a $^1/_8$" audio phone plug on the other end. *The DB-9 connector is filled with micro-electronics!* The DB-9 goes to the PC's comport and the audio plug goes to a jack that you install on the scanner somewhere. On the inside of the scanner, you run a small shielded cable to the NFM Discriminator chip's audio-out pin. That's it for the work!

Powered by the PC's serial port, the ***Pager DataScope*** accepts low-level Discriminator baseband audio signals and converts pager data to RS-232C voltage levels. A trimmer pot in the interface sets a signal trigger level threshhold to minimize errors and to emulate commercial pager hardware.

Once you've tuned to a pager signal, the ***Pager DataScope*** software does all the rest, to decode and display pager data, possibly a very interesting sideline of scanning.

I have a ***Pager DataScope*** unit to evaluate and report on later, but have not had the opportunity to get into it yet. My delay should not penalize JSoft Technology and those of you who are interested in this sort of thing, admittedly an exciting avenue of scanning that represents how digital technology is available to the casual scannist.

For more information, including specs and prices, contact **JSoft Technology, 21414 W. Honey Lane; Lake Villa, IL 60046**, or e-mail to **jsoft@mcs.com**

PROFESSOR PEABODY
RUMINATES & RAPS....PRO-2035

I finally got some time to catch up on my letter pile so here's the poop. My computer deal just came through and I am the proud owner of a 486DX2-66 with 8 meg o' ram and a nice and big 850 meg hard drive along side my old 120 meg drive that I had for years. Now granted this system is not a top of the line Pentium or whatever but it's a quantum leap up from the 386SX-25 I used to run. The speed is oh so nice!!! My buddy that I bought the hardware from is running a 75 MHz Pentium and it is so fast it's scary.

I completed the Zeromatic mod and I must say it's a neat and useful mod. Once I got the dust out of my brain and the fog cleared, it all came together. I first realigned the Zeromatic circuit in the 2005 after a few hour warmup (no transformer) and then tried it out and it works pretty cool. High power intermods that are off frequency by more than 3 KHz are no longer a problem; ***they are ignored***. But I disagree semantically with the author about it not changing the selectivity of the radio. If you look at the radio as a black box and you have a switch that makes intermods go away by 70 percent lets say, would that make an apparent increase in selectivity? I think it does by virtue of they no longer break squelch and stop the scanning process.

But anyway it's neat. A guy out in the boonies of the California mountains won't see much of a difference, but in a metro area such as you and I live in, it is a welcome addition. I have the capability to switch in either narrow or wide Zeromatic just to evaluate each setting and I found that the wide setting is about as useful as the off setting. So the least parts count and maximum effect of the mod is just to use it as off or narrow.

I had a PRO-2035 in the shop last month for an S meter, Autotagger and Extended Delay and after cruising thru the radio and the service manual, my opinion is that it's a stripped down version of the 2004/5/6 series with a lot of the circuitry now done via firmware in the MPU. The squelch circuit is the most offensive in that while using the Extended Delay mod a squelch break hiss now comes out of the speaker after the signal goes away and the ext delay is on because the mute circuit does not shut off the audio as in the previous models. More circuitry has to be added to replicate the old circuit and have the same operation.

Same deal with the AGC driven S meter. The op amp is gone and I had to hunt around to find a point in the AGC line that I could tap off some voltage and not screw up the AGC at all. But the S meter circuit is still the same, as the AGC voltage is a descending voltage like before but it's a little higher in overall amplitude. The pickoff point is the high side of C283 on the main receiver board and it's +.750 volts with no sig and +.600 volts with full sig. Adding some gain in the S meter amp circuit makes for a wider swing which the LM3914 likes oh so much.

I don't like the operation of the diode detected S meter as you can't see a birdie on the meter which affects the AGC and I don't think it's as sensitive as monitoring the AGC line. But I'm a stubborn Swede. Heh, heh

...Have you ever noticed that the UK/Australia models of the 2035 use a different MPU with the P/N of GRE9410? Their PRO-2035 has full coverage from 760 to 1300 MHz? I tried to order the 9410 model MPU from Tandy National Parts but the order taker refused to allude to the possibility that the alternate MPU could be ordered. She called it an export model and would not even tell me how to order export parts so it sounds like the FCC scared the doodies out of the domestic companies.

My question is, does anyone know how we can get in touch with a foreign parts supplier of Tandy parts for MPU conversions? Changing the MPU is certainly not in the category of "*easily modified*" as you know. I just finished an MPU conversion on a BC-2500XL and Uniden was happy as a clam to sell the older model MPU for a cheap $19 plus shipping. It took 3 hours to remove, clean the area and install and test the new MPU. The only problem I had was a tiny solder bridge between 2 pins that flaked the weather search. Once found, it worked fine and dandy as it should. The job was worth it as far as my customer was concerned. My eyes are pretty good, but a microscope would make the job a lot easier.

I used a 2x eye loupe to check all the pins when done and a pencil point tip on my soldering club. I only blew one pin land and it was easily repaired with a small piece of 30 gauge wire.

By the way, I put the Data Tone squelch circuit in a 2006 and after a week of operation it started to squeal and chirp just like in some 2005 model radios. The big capacitor addition stopped the problem cold. So I will be adding the caps as a precaution in all future mods but I just wanted to let you know it happened.

I don't remember the review of the BC-2500XL or the BC-300XL, but the 2500 is a pretty nice radio with a lot of nice features in it. Granted firmware is cheap but the RF performance was excellent also as I used it for a week to make sure the MPU swap was solid. Sensitivity was good and the triple conversion was helpful in the intermod department. The only gripe was no Zeromatic type circuit when in search mode as with the Radio Shaft models.

The other groovy thing about the radio is that there's the same display chip as in the 2004,5,6 radios and you could wire it up for operation with full 2-way interface capability. It has the UPD7225g for display chip. But wiring the board is tough cuz of the compactness of design. Well, that's all the poop for now.

ED Reply: *Yo, Prof, how's it happening? We missed you! The world loves you and wants you back! Let's have some more of your wizardry before radioing dies off and goes the way of the chambermug. I slipped 'em some wizardry of my own on page 10 this month, but we need yours, too.*

***Re your new computer**, no, a 486DX2/66 is not a Pentium, but it's close enough for most practical purposes. You are not at all handicapped with it. By the way, I'd suggest using that 120-Mb drive as C:\ with just Windows 95 installed on it, and the new 850-Mb hard drive as D:\ for all your data and other programs. And yes, I strongly suggest Windows 95 now! I have been an official Microsoft Beta Tester for Win95 since May, 1994, and can attest to its power and capabilities for **"Where do you want to go today?"** It's worth it!*

I think your comments on selectivity and the Zeromatic Mod are ok so long as you qualify that you're not talking about IF selectivity. Obviously, the Zeromatic circuit has no relation to the IF strip where selectivity is established and set. But I agree, when interference is rejected, that is a form of selectivity, eh?

Re the PRO-2035, it didn't really relegate any of the 2006's hardware functions to firmware exactly....but the new functions are almost all firmware, for sure. In fact, there are only minor differences here and there between the hardware of the 2006 and the 2035. The Logic/CPU board was totally redesigned, of course, and it eliminated the MUTE function altogether. That explains your hearing a hiss when the Extended Delay goes into action. I dunno how we'd eliminate that right off. The 2035 also eliminated IC-10 in the 2006, that infamous little CMOS bilateral switch in the Squelch circuit. The PLL circuit differs a little, but looks similar. Beware, because the Master Reference Oscillator in the 2035 is 12 MHz as opposed to 10 MHz in the 2004/5/6 series.

Frankly, the PRO-2035 is not destined for fame and notoriety: it has already been replaced by Radio Shack with the PRO-2042, but I know little more yet because the local stores don't have the new catalogs in stock yet. If true, then the PRO-2035 will amount to only a bridge between the venerable 2004/5/6 series and whatever is to be the next great series, perhaps like the PRO-2005 bridged the gap between the PRO-2004 and the PRO-2006.

A lot of people have spoken highly of the BC-2500XLT, so maybe there is something to it as a decent scanner. Unfortunately, it's gone now, replaced by the BC-3000XLT.

I can't say for sure, because we've had no requests and done no research, but it looks like the CE-232 Scanner/Computer Interface could be workable with the BC-2500XLT. The 4 x 7 keyboard and the UPD7225g *LCD Display chip are certainly compatible enough. The Catch-22 is how the Serial Data and Command Data are done. Chip Select and Clocking are probably compatible, but I can't imagine Uniden and GRE having the same formats of data flow, and if they're not the same, then the BC-2500 data stream would have to be decoded and a whole new control program written for the CE-232. If that has to be done, then it could not be cost effective thanks to little or no demand. I wonder if the BC-3000XLT is similar in design? At worst, the CE-232 can probably be made to serve as a 1-way controller for the BC-2500XLT. I could write a *.PER file for it, if someone (you?) wanted to try.*

Ummm, what's this about a big difference between the diode S-meter and AGC S-meter versions? How? AGC is derived through a diode at the same place we hang our own S-meter diodes. Same source, same diodes. Maybe you could look into that for a future article or something?

Hey, good to hear from you again, Prof!

FROM THE READERS

Radio Shack Parts in Canada

From: Robert Keene, Downesview,Canada

Robert called to inform us that Radio Shack's outlet in Canada is 1-705-728-7474 ext 4384 OR 1-800-661-2390. EL panels sell for $25.67, part # L2082.

SHORTWAVE ANTENNA NOTES

From: Larry Gibes, Longmont, CO

I have a question about shortwave antennas. Can I simply make a 1/4 wave loop? Do I connect one end to ground? My radio doesn't have an antenna jack. Is it easy to add one?

ED: *Shortwave is generally defined as 2-30 MHz. A quarter-wave loop will vary from just under 3-ft dia at 30 MHz to about 40-ft dia at 2 MHz. Trouble is, a ¼λ loop will function as such only over a very narrow band of frequencies, typically about ±10% of the frequency. Loops are not specifically grounded, but one end of the loop is connected to the shield of the coax while the other end of the loop is connected to the center conductor of the coax. Again, ¼λ loops are narrow banded and generally not idea for shortwave listening unless you know what you're doing and what to expect. For a quick and dirty higher performance antenna, just throw up as much wire as you can, as high as possible off the ground. 50-100 ft usually works wonders for a portable SW.*

You should be able to add an external antenna connector easily enough, depending on the radio and a place to put it. Use either a female BNC connector or a female SO-239 connector, chassis-mount for either type. Install it. Ensure the shell of the connector connects inside the radio to chassis or PCB ground. The center lug of the connector can be wired to where ever the portable antenna or internal antenna is wired.

An external "longwire" antenna can also just have an alligator clip on its end, that clips to the portable antenna, if there is one.

CTCSS & PL and OTHER DECODERS

From: Joseph Shynn, Toronto, Canada

Could you have another look at your PL Board mod in Volume II of your Scanner Modification Handbook. The equivalent of your state police up here use a system which maintains the carrier after voice is finished; locking the scanner with carrier squelch.

Perhaps a recommendation to resume scanning after loss of tone by means of the other output of the tone board would help! Oh yeah, more pictures of Cindy and less of you...10-4 Best wishes & regards.

ED: *Just for that, I'm printing a full double page spread of my mug, and no more Cindy! I'm better looking than she! ☺ But anyway, do you have my CTCSS/PL tone article confused with my later Data/Tone Squelch module (MOD-44)? There is no relationship of PL tones to after-transmission carriers or anti-scanner signals. CTCSS or PL tones are subaudible precise tones that allow fleet supervisors to render mobile radios silent on receive except when their own base or other mobile units are talking. This prevents the working crews from paying attention to other companies who share the same frequency.*

On the other hand, V1N10 of the WSR presented my renowned Data/Tone Squelch (DSQ) that prevents the scanner from locking or staying locked onto audible tones, computer data signals and other non-voice signals. The PRO-2004/5/6 and 2035 scanners already have SOUND SQUELCH that works much the same way except on dead or silent carriers. Finally, there is what is called the "Toronto MetroMod", a special tone decoder that keeps the scanner from hearing those anti-scanner tones between transmissions. This mod was presented also in V1N10. I think one of these two latter mods is more to your needs than messing with the CTCSS/PL decoder mod. This stuff can be mighty confusing, to say the least. See V1N10 for the gory details..

PRO-2035/CE-232 NOTES

From: William Shaft, Tinley Park, IL

Dear Bill, I have decided to interface the CE-232 with the PRO-2035. It's a yet to accomplish task for me, but I have the service manual and one for my PRO-2004.

Finding out Bill Cheek and his electronic can do's has helped me a lot. I have no electronic background and everything I learned was from books and trial & **error**. I did learn how come from every mistake.

My first kit was a one tube radio in a cardboard box with a piece of plywood in the bottom to mount parts 22.5 B + 1 1/2 volt power and modification instructions to convert it to a two tube shortwave receiver. I spent a lot of time past my bedtime listening to the ham bands through my Western Electric headphone.

I enjoyed your last copy of the WSR. You had the last persuasion I needed to convince me to retire with a 30-yr pension from a steel mill (at 53-yrs old) and never want a serious job again. I have my health and my brain and am going from there. Sincerely. PS. Thanks for your help and wisdom.

ED: *Well, I hope any influence I had was to you doing something meaningful, fun, and profitable! I got a philosophy, Willie, that the Good Lord comes around now and again just looking for volunteers, kind of like my old Chief used to do back in the Navy. He'd come in and pick people who weren't busy and haul 'em off for who-knows-what. But he'd leave the busy ones the hell alone. I figure the Good Lord is a lot like that old Chief. Ya never know when he's gonna come calling, but if he's got a choice, I reckon he'll pick those who don't have anything much to do. Hey, if we're busy on something good, then he'll leave us be, if he can.*

So, whatever you do, don't lay around and look like you ain't got anything to do. Besides, the missus won't take a shine to you wallering around underfoot all the time. You find yourself something needful and fun to do for your 2nd 30-yr career, if you know what's good for you. Something that makes people happy would be about right. Am I wrong?

Now what I want to know is where did you get that ***Western Electric Headphone****? When I was a kid, I got mine from phone booths. All ya had to do was unscrew that earpiece and help yourself. Same with the mouthpiece for that matter. They were free in those days. You could even get a whole handset if you wanted it, but my Ma knew what those were and disallowed 'em. She didn't know about the mouthpieces and earpieces, though.*

We are now including instructions and software for the PRO-2035 as standard in all CE-232 Kits. All Kits sold after 9/1/95 will have program module and full instructions for the PRO-2004/5/6 ***and*** *PRO-2035 at no extra cost.*

For upgraders, we can provide the latest CE-232 Program ***Disk-Only*** *with Supplementary Instructions/Software for the PRO-2035 for handling costs of $14.95, ppd. The* ***Disk-Only*** *contains full software and an ASCII textfile manual for the PRO-2004/5/6/2035. Printed instructions for the PRO-2035 will be included with the* ***Disk-Only****, only upon request. The full,* ***printed CE-232 Manual*** *remains unchanged at $25, deductible against an order placed within 30-days. The CE-232 Developer's Kit (3rd party programmer clues & hints) is FREE from the BBS as filename: CEDEVELP.ZIP or $29.95 ppd, as a disk & laser printed booklet. These offers are standard and available to all now.*

WSR & MAGAZINE ON DISK?

From: Raymond Reese, Bremerton, WA

Called to suggest we incorporate the WSR into an electronic MAGAZINE ON DISK. At the very least put particulars of what it would take, cost, etc. in next issue and let the readers decide...(*What a Great Idea!!! Cindy*)

ED: *Oh nooooo that's not a great idea. With the WSR on-disk, our work would be copied and spread around the world within 24-hrs by unscrupulous people who have no regard for copyrights. Enough of my work appears around the Internet as it is. I admit, it would be nice if we could do that. And maybe the day will come when we can. Right now, I don't know exactly how to do it and still protect our rights, but more importantly, I don't know how to do it and present all the graphics and photos in a format universally acceptable to all. The idea is under consideration, but don't look for implementation any time real soon.*

BC-855XLT TALK

From: Alan Gorsuch, Homestead, FL

I don't expect an answer to this, but I just wanted to let you know that I modified my BC-855XLT (date code: OKIB) by the instructions on p147 of The Ultimate Scanner and that both mods, cellular restoration and memory upgrade, worked perfectly.

Cellular restoration is hardly worth the trouble because the image rejection of this receiver is so poor that a large chunk of the cellular band can be heard anyway. It comes through loud and clear in the 894 to 916 MHz range, 21.7 MHz above the actual frequency. I have bought two other BC-855XLTs for gifts and they had the same design defect. I don't listen to the cellular band, so consider this to be of technical interest only. The memory upgrade from 50 to 100 channels is

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well worth the price of the book. Keep up the good work. I hope to see future books from you.

ED: Oh, I suppose there will be more books, but right now I am waiting for feedback from people as to WHAT KIND of books they want. Frankly, the out and out modification/hack books have seen better days, I think. Scanners are going over to firmware and simply cannot be hacked. I've been thinking of doing detailed hack manuals for specific scanners, but no one has given me any input to speak of, so I'm hanging high and dry.

The BC-855XLT is an example of what's not possible anymore.....today's scanners cannot be hacked for either cellular coverage nor for memory, except for a decreasing few.

SUPER-SNOOP MICROPHONE

Here is a wicked little tape recorder tool for situations where the built-in microphone just doesn't pick up all the sounds that you want. My little (and I mean tiny) preamplified microphone will turn your deaf tape recorder, audio amplifier or other listening device into a set of "ears" so sensitive that it will pick up the sound of a pair of frolicking gnats at 50-feet! My Super-Snoop-Mic permits a tape recorder to clearly detect even a faint whisper in a fair sized room. The output of my Super-Snoop-Mic can be fed into an earphone amplifier or any audio device for exceptional sensitivity and fidelity. In fact, this puppy can serve as a cheap hearing aid for all sorts of low-level audio needs! It is especially suited for government operatives, eavesdroppers, private dicks, students, and hobbyists who need better recordings!

Build your Super-Snoop-Mic on a small piece of perf board, or as I did, point-to-point without a board! A #18 stiff copper wire (ground) can form the backbone structure of the assembly. Use your imagination to create the housing. I used Radio Shack's 272-340 mini lamp holder with the lamp holder guts removed, to hold everything including the electret Mic element and the Gain Adjust trimmer potentiometer.

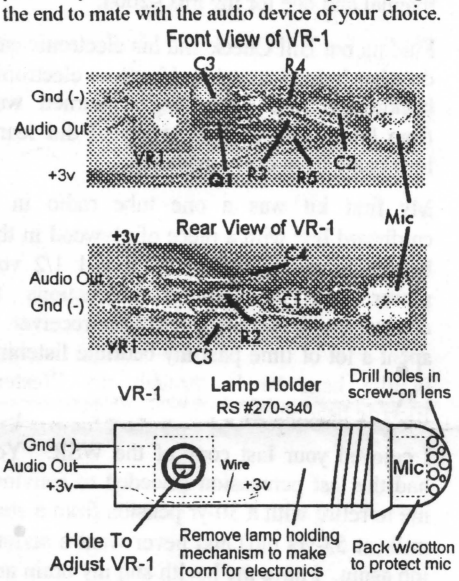
You might do better or worse with another design, but be creative: build it into a pen, cigarette lighter, or something equally unobtrusive. I modeled one unit after a Vietnam surveillance device that looked like an animal dropping. This "style" can be conspicuously placed, if hiding isn't possible, because no one in their right mind is likely to handle it!

SUPER-SNOOP-MIC - PARTS LIST

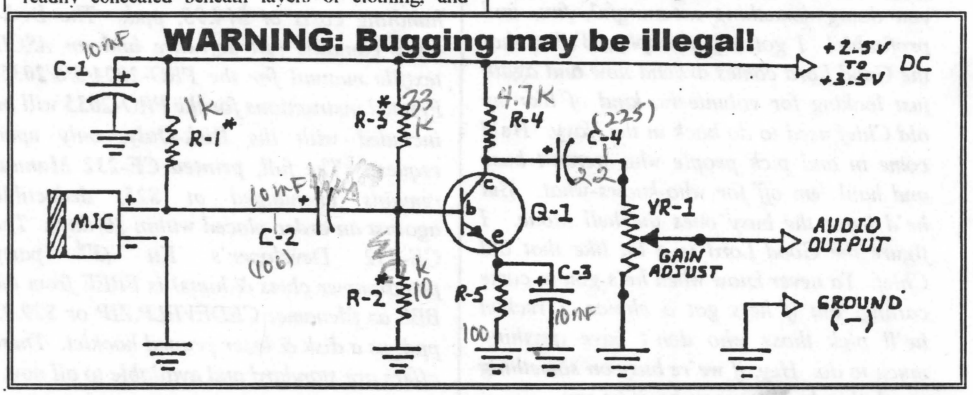
Ckt Sym	Description	Radio Shack Catalog #
Mic	Electret microphone element	270-090
R1	Resistor, 1k, 1/4-watt	271-1321
R2	Resistor, 10-k, 1/4-watt	271-1335
R3	Resistor, 33-k, 1/4-watt	271-1341
R4	Resistor, 4.7-k, 1/4-watt	271-1330
R5	Resistor, 100 ohm, 1/4-watt	271-1311
C1-3	Capacitors, tantalum, 10-uF	272-1436
C4	Capacitor, tantalum , 2.2-uF	272-1435
VR1	Trimmer potentiometer, 100-k	271-284
Q1	Trnstr, NPN, 2N2222A/sim	276-2009/2016

There's nothing critical to the circuit, but tantalum capacitors and precision metal film resistors for R-1, R-2 & R-3 will minimize internally generated noise and help establish a super low threshold of detection! Radio Shack has a good supply of tantalum capacitors but you might have to go to an electronics supply house for the precision metal film resistors. Then again, you might find the needed values in Radio Shack's PMF resistor assortment package, 271-309. Good results can be obtained from the values specified in the Parts List, however.

The Super-Snoop-Mic requires a DC supply of 2.5v-3.5v with 3v optimum. I designed the amplifier to be powered from the pair of AA batteries in a microcassette tape recorder which comprised the majority of my needs. You can also use a pair of silver oxide, mercury, or other hearing-aid batteries to power the unit for a reasonable time; current drain is low at 1-ma or so. The Super-Snoop-Mic can be readily concealed beneath layers of clothing, and other obstacles and still perform a superb job. It sports a voltage amplification factor of 47 or a power gain of 33-dB. This might be too much for some situations, so a GAIN control is included in the output circuit to adjust for exacting needs. Polish off the Super-Snoop-Mic with a flexible patch cable, preferably shielded mini-coax with a phone plug on the end to mate with the audio device of your choice.



Oh, the Super-Snoop Mic can be microminiaturized with chip caps/resistors, and it can serve as the audio pickup for RF listening devices. Uses, styles, and methods are virtually unlimited! Have fun!



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IN THIS ISSUE

ISSN-1061-9240

FIRST CLASS MAIL

+ Pet Peeve Contest Extended to 9/30/95 ~ Why Air Our Pet Peeves
+ DEFLATOR@AOL.COM is Peeved! ~ ***Scanner Data Base from Roy Schahrer***
+ In Memoriam: Wm. Wilson, Aberdeen, UK ~ The Future of Radio & Scanning
+ ***How to Buy a Computer for Shack & Station*** ~ Computer Buylist/Checklist
+ Hacker Resources: MECI and Power Express ~ Sorry We're Late (and why)
+ ***New Scanner Product: Pager DataScope*** ~ Radio Shack Parts in Canada
+ Prof. Peabody Ruminates & Raps; PRO-2035 & more
+ Shortwave Antenna Notes ~ CTCSS, PL, & Other Decoder Notes
+ PRO-2035/CE-232 Notes ~ BC-855XLT Talk
+***Powerful Super Snoop Microphone Project***